

# APPENDIX A: DRAFT PROGRAMMATIC SECTION 4(F) EVALUATIONS

Section 4(f) resources in the project area include Wills Memorial Park, the Pleasant Grove Railroad Bridge (Site 42UT1452, Structure number OC-149), the Union Pacific Railroad and Depot (Site 42UT1029), and the historic structure at 100 Adam Street (see Figure A-1).

## **Wills Memorial Park**

The proposed project will require 0.6 acres from Wills Memorial Park (220 South 420 West), and will constitute a “use” of a Section 4(f) resource. A draft Programmatic Section 4(f) Evaluation for Federal Highway Administration (FHWA) Projects that Necessitate Minor Takes of Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges has been prepared and is included in this Appendix.

## **Pleasant Grove Railroad Bridge (Structure number OC-149)**

The proposed project will have an *Adverse Effect* on the Pleasant Grove Railroad Bridge – the existing bridge will be demolished (see July 12, 2005 Determination of Eligibility and Finding of Effect (DOEFOE) in Appendix D). A draft Programmatic Section 4(f) Evaluation for use of Historic Bridges has been prepared and is included in this Appendix.

## **Union Pacific Railroad and Depot**

The proposed project will have *No Effect* on the Union Pacific Railroad and Depot Foundation (see July 12, 2005 DOEFOE in Appendix D). A Section 4(f) Evaluation does not need to be prepared.

## **100 Adam Street**

According to Section 6009 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), the requirements of Section 4(f) of the Department of Transportation Act of 1966, as amended, will be considered satisfied with respect to a Section 4(f) resource if it is determined that a transportation project will have only a “de minimis impact” on the 4(f) resource. For historic properties the de minimis criteria are defined as “no adverse effect” or “no historic properties affected” under Section 106 of the National Historic Preservation Act (NHPA). The FHWA has determined that the Preferred Alternative will have a *No Adverse Effect* on the historic property at 100 Adams Street (see DOEFOE dated March 23, 2005 and SHPO concurrence dated December 14, 2005 in Appendix D). Based on the above criteria, the FHWA has determined that the Preferred Alternative will have a “de minimis impact” on the historic property at 100 Adams Street; therefore, the requirements of Section 4(f) of the Department of Transportation Act of 1966, 23 U.S.C. § 138 (as amended) and 49 U.S.C. § 303 (as amended) are considered satisfied.

Appendix A contains the following:

- Draft Programmatic Section 4(f) Evaluation for FHWA Projects that Necessitate Minor Takes of Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges
- Draft Programmatic Section 4(f) Evaluation for Historic Bridges
- Figure A-1 Section 4(f) Properties
- Figure A-2 Proposed Action Impacts to Wills Memorial Park
- Figure A-3 Section 4(f) Avoidance Alternative (for Wills Memorial Park)

**FEDERAL HIGHWAY ADMINISTRATION - UTAH DIVISION**  
PROGRAMMATIC SECTION 4(f) DETERMINATION AND APPROVAL  
UNDER THE NATIONWIDE PROGRAMMATIC 4(f) EVALUATION  
AND APPROVAL FOR FHWA PROJECTS THAT NECESSITATE  
MINOR TAKES OF PUBLIC PARKS, RECREATION LANDS,  
AND WILDLIFE AND WATERFOWL REFUGES

Project # **STP-0089(76)300E State Street (US-89) Railroad Crossing, Pleasant Grove**

**DESCRIPTION/LOCATION OF HISTORIC PROPERTY**

Wills Memorial Park is located at 220 South 420 West (see Figure A-1) and includes a pavilion, two baseball diamonds, and two barbecue grills. This park is adjacent to the Pleasant Grove Rodeo Grounds and is also home to a branch of the Mountainland Head Start program. Head Start is a federally funded program for preschool children from low-income families and children with special needs.

Any response in a box ([ ]) requires additional information prior to approval. Consult Nationwide 4(f) evaluation.

**APPLICABILITY**

	YES	NO
1. Is the 4(f) site adjacent to the existing highway?	<u>X</u>	[ ]
2. Does the amount and location of the taking impair the use of the remaining Section 4(f) lands for its intended purpose?	[ ]	<u>X</u>
3. a. If the total 4(f) site is less than 10 acres, is the taking less than 10% of the total acreage?	—	[ ]
b. If the total 4(f) site is from 10-100 acres, is the taking less than 1 acre?	<u>X</u>	[ ]
c. If the total 4(f) site is greater than 100 acres, is the taking less than 1% of the site?	—	[ ]
4. Are there any proximity impacts which would impair the use of the 4(f) lands for their intended purpose?	[ ]	<u>X</u>
5. Have the officials with jurisdiction over the property agreed in writing with the assessment of impacts and proposed mitigation?	<u>X</u>	[ ]
6. Have Federal funds been used in the acquisition of improvements of the 4(f) sites?	[ ]	<u>X</u>

If yes, has the land conversion/transfer

- |    |  |          |          |
|----|--|----------|----------|
|    | been coordinated with the appropriate Federal agency, and are they in agreement? | [ ]      | —        |
| 7. | Does the project require the preparation of an EIS?                              | [ ]      | <u>X</u> |
| 8. | Is the project on new location?  | [ ]      | <u>X</u> |
| 9. | The scope of the project is <u>one or more</u> of the following:                 | <u>X</u> | [ ]      |
| a. | Improved traffic operation   | <u>X</u> |          |
| b. | Safety improvements  | <u>X</u> |          |
| c. | Interstate Maintenance   | —        |          |
| e. | Bridge replacement on essentially the same alignment                             | <u>X</u> |          |
| f. | Addition of lanes  | <u>X</u> |          |

#### ALTERNATIVES CONSIDERED

YES NO

- |    |   |          |     |
|----|---|----------|-----|
| 1. | The "do nothing" alternative has been evaluated and is considered not to be feasible and prudent.   | <u>X</u> | [ ] |
| 2. | An alternative has been evaluated which improves the highway without any 4(f) taking and it is considered not to be feasible and prudent. | <u>X</u> | [ ] |
| 3. | An alternative on a new location avoiding 4(f) taking has been evaluated and is considered not to be feasible and prudent.                | <u>X</u> | [ ] |

#### MINIMIZATION OF HARM

YES NO

- |    |   |          |     |
|----|---|----------|-----|
| 1. | The project includes all possible planning to minimize harm.  | <u>X</u> | [ ] |
| 2. | Measures to minimize harm include the following:  |          |     |
| a. | Replacement of lands used with lands of reasonably equivalent usefulness and location, and of least comparable value. | —        |     |

- |    |  |               |
|----|--|---------------|
| b. | Replacement of facilities impacted including sidewalks, paths, benches, lights, trees, and other facilities. | <u>  X  </u>  |
| c. | Restoration and landscaping of disturbed areas.  | <u>  X  </u>  |
| d. | Special design features.   | <u>      </u> |
| e. | Payment of the fair market value.  | <u>  X  </u>  |
| f. | Improvements to the remaining 4(f) lands equal in cost to the fair market value.                             | <u>      </u> |
| g. | Other measures.  | <u>  X  </u>  |

**COORDINATION**

- |  | YES          | NO     |
|--|--------------|--------|
| 1. The proposed project has been coordinated with the Federal, State, and/or local officials having jurisdiction over the 4(f) lands.        | <u>  X  </u> | [    ] |
| 2. In case of non-Federal 4(f) lands, the official with jurisdiction has been asked to identify any Federal encumbrances and there are none. | <u>  X  </u> | [    ] |
| 3. For bridge replacement projects coordination with the US Coast Guard has been completed (if applicable).                                  | <u> NA </u>  | [    ] |

**SUMMARY AND APPROVAL**

The project meets all criteria included in the programmatic 4(f) evaluation approved on December 23, 1986.

All required alternatives have been evaluated and the findings made are clearly applicable to this project.

The project includes all possible planning to minimize harm and assurances have been given that measures to minimize harm will be incorporated into the project.

Approved:

\_\_\_\_\_  
FHWA Environmental Coordinator

\_\_\_\_\_  
Date

\_\_\_\_\_  
Division Administrator

\_\_\_\_\_  
Date

# Programmatic Section 4(f) Evaluation

## STP-0089(76)300E State Street (US-89) Railroad Crossing, Pleasant Grove

This Programmatic Section 4(f) Evaluation is for Wills Memorial Park located at 220 South 420 West in Pleasant Grove, Utah. This evaluation addresses applicability to Section 4(f), project impacts, alternatives considered, minimization of harm, and coordination efforts.



*Wills Memorial Park*

### Purpose

The purpose for the project is discussed in Chapter 1 of the Environmental Assessment. The following is a summary of the purpose discussion:

- **Accommodate existing and projected travel demand along State Street.** Providing increased capacity to a notable bottleneck area that is located on an important local and regional arterial facility will allow for better accommodation of existing and projected future travel demands by reducing travel delays and congestion, improving State Street's ability to satisfy both the local and regional needs.
- **Provide a transportation facility consistent with current standards, including those adopted by the Utah Department of Transportation (UDOT) and the American Association of State Highway and Transportation Officials (AASHTO).** Current design standard deficiencies include:
  - Substandard pedestrian facilities
  - Substandard overhead clearance at the Utah Transit Authority (UTA)/Union Pacific Railroad (UPRR) overpass structure.
  - Inadequate storm drain system
- **Provide a transportation facility consistent with state and regional plans.** These plans include:
  - UDOT has identified the need for State Street improvements as part of the state highway system.
  - The Mountainland Association of Governments (MAG), in its Utah Valley 2030 Long Range Transportation Plan (LRTP), has recognized State Street as an important facility to satisfy local and regional travel demands.
- **Enhance opportunities to incorporate intermodal facilities within the corridor.**
  - Provide a roadway section and structure that can better accommodate existing and future rail corridor uses of UTA and UPRR without precluding the possibility of future transit opportunities
  - Provide for future pedestrian and bicycle facilities
- **Improve continuity of State Street (US-89) corridor** by improving the deficient section of State Street with a roadway section that is consistent with the northern and southern segments.

## Need

The need for the project is discussed in Chapter 1 of the Environmental Assessment for this project. The following is a summary of the “need” discussion:

- **Capacity and intersection operations need to be improved.** Drivers on State Street (US-89), from 200 South to Geneva Road are experiencing increasing congestion as traffic volumes have exceeded the capacity of the two-lane segment under the UTA/UPRR Bridge.
- **Roadway and bridge design deficiencies need to be improved.**
  - The existing longitudinal grades of sidewalks along State Street (US-89) exceed the maximum gradients established by the Americans with Disabilities Act (ADA) of 1990.
  - The existing UTA/UPRR bridge does not meet current UDOT design standards for roadway overhead clearances. The minimum overhead clearance established by UDOT is 16'-6"; the existing overhead clearance is 14'-4". In addition to the substandard vertical clearance, the bridge is functionally deficient since its limiting width restricts State Street to two-lanes; a five-lane typical section is needed to accommodate the current and projected Year 2020 traffic volumes.
  - The aging storm drain system, for this portion of State Street, is no longer capable of safely accommodating the current needs. This deficiency results in the accumulation of water within the roadway during typical hydraulic events.
- **System continuity needs to be improved.** The State Street corridor maintains a five to seven lane typical section throughout Utah County, with the exception of the 200 South to Geneva Road segment. This segment narrows to a two-lane typical section as State Street passes under the UTA/UPRR railroad bridge.

## Project Description

The proposed project provides improvements to State Street between 200 South and Geneva Road, including:

- Widening of the corridor to a 127-ft, consistent five-lane typical section (four 12-ft travel lanes with a 14-ft two-way continuous left-turn lane) with 8-ft shoulders, curb and gutter, 11-ft park strips and 6-ft sidewalks between 200 South and Geneva Road.
  - Typical section allows for a future seven-lane typical section to match the back of sidewalk location
- Widening and improving the signalized intersection of State Street and Geneva Road
- Making storm drain improvements along the corridor.
- Making improvements to vertical clearance at the UTA/UPRR crossing – State Street will cross over the railroad tracks.

## Applicability

1. Wills Memorial Park is adjacent to the existing highway (US-89).
2. The amount and location of property required from Wills Memorial Park will not impair the use of the remaining lands for its intended purpose.
3. Wills Memorial Park currently has 9.5 acres of developed land, but the city plans to develop an additional 3.5 acres at the southeast quadrant of the park increasing the total developed park area to approximately 13 acres. The proposed project will require approximately 0.6-ac from Wills Memorial Park.
4. There are no proximity impacts which would impair the use of Wills Memorial Park for its intended purpose.
5. Pleasant Grove City has agreed, in a letter dated January 5, 2006 (see Chapter 4), with the assessment of impacts and the proposed mitigation to Wills Memorial Park.
6. Federal funds have not been used in the acquisition or improvements to Wills Memorial Park (see May 16, 2005 letter in Chapter 4).
7. The proposed project does not require the preparation of an Environmental Impact Statement (EIS).
8. The proposed project is not on new location.
9. The scope of the proposed project includes: improving traffic operations, safety improvements, bridge replacement on essentially the same alignment, and addition of lanes.

## Alternatives

The following alternatives avoid any use of the historic property. The impacts resulting from each of these alternatives is discussed in the **Findings** section of this evaluation.

1. Do Nothing.
2. Improve State Street to address the purpose and need without use of the Section 4(f) property.
3. Building State Street at a location that does not require use of the Section 4(f) property.

## Findings

1. **The Do Nothing Alternative** has been evaluated and is considered not prudent because it would not meet the project purpose and need, as follows:
  - The Do Nothing Alternative would continue the congestion at a notable bottleneck area that is located on an important local and regional arterial facility.
  - The Do Nothing Alternative would not improve the functionality of the State Street (US-89) corridor as an important local and regional, north-south travel corridor consistent with the local and regional planning of MAG, UDOT, and Pleasant Grove.
  - The Do Nothing Alternative would perpetuate the substandard vertical clearance at the UTA/UPRR overpass structure.
  - The Do Nothing Alternative would not enhance the opportunities to incorporate inter-modal facilities

within the corridor such as UTA rail transit and pedestrian and bicycle facilities.

2. **Improve State Street to address the purpose and need without use of the Section 4(f) property.** This alternative has been evaluated and is considered not prudent. This alternative is feasible because it is technically possible to design and build but it does not meet the prudent standard. This alternative creates an accumulation of factors that collectively have adverse impacts that present unique problems or reach extraordinary magnitudes. These factors include an unacceptable and severe adverse social, economic, or other environmental impact; extraordinary community disruption; and additional costs of an extraordinary magnitude. To completely avoid Wills Memorial Park, the roadway would need to be shifted further to the north and would cause the following adverse effects (see Figure A-3):

Unacceptable and severe adverse social, economic, or other environmental impacts:

*Mobile Home Park*

Nine out of 21 mobile homes located in the mobile home park north of State Street would be directly impacted by the north shift and would need to be removed. This would force the relocation of all the residents of the mobile home park, since the operation and maintenance of the mobile home park would no longer be economically viable with almost half of its residents gone. The homes located in the mobile home park are fairly old and many are in poor condition and can't be moved. In addition, there are difficulties for mobile home park residents in selling homes in this park and of securing replacement housing at similar expense.



*Mobile Home*

Two surveys of residents living in this mobile home park were conducted: the first in March 2004 and the second in March 2005. Results of the 2004 survey suggest that neighborhood social cohesion is not particularly strong among mobile home park residents. Although a majority of the respondents said they would be somewhat sorry or very sorry if they had to move away from the neighborhood, such response may have more to do with a desire to maintain current low-cost housing situations, workplace accessibility, or proximity to friends and relatives living elsewhere in the city than with the strength of social bonds and community cohesion in this small neighborhood.

Data from the 2005 survey are consistent with the 2004 survey results. The two surveys indicate that the mobile home park population is characterized by a high concentration of Hispanic households and a substantial number of households with income levels falling below poverty thresholds. Few mobile home park residents have lived there for longer than five years. The high degree of residential turnover evident in the mobile home park undoubtedly contributes to the fact that social cohesion does not appear to be especially strong in this small, localized neighborhood.

Even though overall social cohesion does not appear to be particularly strong among residents in the corridor-adjacent trailer park, some residents of that neighborhood do report substantial social ties with their neighbors. Most survey respondents indicated that they would be sorry to leave and most were concerned about the potential difficulty of finding another mobile home park within the area that would accept their old mobile homes. Further research indicates that these mobile homes would not be accepted in other mobile home parks due to the age of the trailers being more than ten years old.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by the President on February 11, 1994, directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent possible and permitted by law. The mobile home park contains several residents who are considered minority or low-income. The north shift would therefore cause disproportionately high and adverse effects on the low-income and minority populations located in the mobile home park.



Even though these residents could be relocated to decent, safe, and sanitary housing, in addition to the potential for increased housing costs, many of these residents would experience adverse effects and adaptive difficulties associated with the disruption and changes to their lives, including the need for adjusting to new neighborhoods, new travel routes, and new shopping areas; changes in proximity to friends and relatives living elsewhere in the city; and potential difficulties associated with workplace accessibility.

#### *Business Relocations*

A roadway shift to the north would relocate the following additional businesses as compared to the proposed action: Supply Sergeant Store and Don's Auto (see Figure A-3).

#### Extraordinary community disruption:

Community disruption, associated with a north shift alternative would be limited to the residential community located in the mobile home park, as described in the previous section.

#### Additional construction costs of an extraordinary magnitude:

Preliminary project cost estimates indicate that a north shift alternative that would impact the mobile home park would cost about \$10.8 million while the alternative that takes 0.6-acres (less than five percent) of the 13-acre Wills Memorial Park property and avoids the mobile home park would cost \$9.0 million, a cost difference of 20%. This increased cost for the north shift is associated with right-of-way acquisition costs developed by UDOT.

#### An accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems or reach extraordinary magnitudes:

Collectively, impacts to the mobile home park residents together with increased costs (about twenty percent) associated with a north shift present unique problems and reach extraordinary magnitudes.

The north shift has an accumulation of factors that collectively have adverse impacts that reach extraordinary magnitudes, including impacts to the mobile home park residents, impacts to two businesses, and additional construction costs associated with right-of-way acquisition (twenty percent). Therefore, the north shift is not prudent.

3. **Building at a location that does not require use of the Section 4(f) property** was evaluated. This alternative would include building a new road and bridge on new alignment either north of the existing alignment or south of the existing alignment. This alternative has been evaluated and is considered not prudent. This alternative is feasible because it is technically possible to design and build but it does not meet the prudent standard. This alternative creates an accumulation of factors that collectively have adverse impacts that present unique problems or reach extraordinary magnitudes. These factors include an unacceptable and severe adverse social, economic, or other environmental impact; extraordinary community disruption; and additional costs of an extraordinary magnitude.

#### Unacceptable and severe adverse social, economic, or other environmental impacts:

##### *New Alignment to the North*

Building a new alignment to the north of the existing alignment would avoid Wills Memorial Park, but would relocate the mobile home park and cause adverse social and environmental justice issues (see above discussion). The following businesses would also be relocated: Auto Appearance Plus, Supply Sergeant General Store, Don's Auto, Allred's Ace Hardware, Parts Unlimited, One Man Band Café, and the Purple Turtle. In addition, the Pleasant Grove Historic District (listed on the National Register of Historic Places (NRHP)), may be impacted by a new alignment to the north. The Pleasant Grove Historic District is roughly bounded by 100 North, 500 South, 300 East, and 100 West (see Figure A-1).

#### *New Alignment to the South*

Building a new alignment about 950-ft to the south of the existing roadway would avoid Wills Memorial Park, but would relocate several residences and businesses, including a mobile home park located south of State Street that may have similar social and environmental justice issues as the mobile home park located north of State Street.

#### Extraordinary community disruption:

New alignments to the south or to the north would cause community disruption in the residential communities in either the mobile home parks to the north or to the south.

#### Additional construction costs of an extraordinary magnitude:

Preliminary project cost estimates indicate that new alignments to the south or to the north would have a substantial cost difference as compared to the proposed action.

#### An accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems or reach extraordinary magnitudes:

Collectively, impacts to the mobile home park residents together with increased costs associated with new alignments to either the south or to the north present unique problems and reach extraordinary magnitudes.

Building on a new location that does not require the use of Wills Memorial Park has an accumulation of factors that collectively have adverse impacts that reach extraordinary magnitudes, including impacts to mobile home park residents, impacts to businesses, and additional construction costs. Therefore, building on a new location is not prudent.

## **Measures to Minimize Harm**

The amount and location of the taking in Wills Memorial Park does not impair the use of the remaining Section 4(f) lands for its intended purpose. The proposed project would widen the roadway south in this area and would require about 0.6-ac from this Section 4(f) property, or about 5% of the total property (see Figure A-2). The J.C. Building (used by Mountainland Head Start) would be removed, and two barbecue grills would need to be relocated.

The alignment of the proposed project is shifted as far as possible from the park without requiring the relocation of any homes in the mobile home park.

The proposed project utilizes an overpass option for the replacement of the bridge, instead of an underpass which would require a perpetual easement for retaining walls. The overpass option does not require a perpetual easement on the park property, therefore minimizing the impact to the park.

## **Mitigation**

Two barbecue grills are currently located relatively close to the existing roadway alignment. As part of the proposed project, the barbecue grills will be relocated closer to the pavilion, an area more favorable to picnicking.

A new J.C. Building (used by Mountainland Head Start) will be constructed in another area of Wills Memorial Park.

The city has proposed a new layout of the park that would increase the number of softball fields from two to four (see Figure A-2). The new layout of the park is consistent with the proposed project and would place the softball outfield, instead of the spectator area, closest to the roadway. UDOT has agreed to provide financial assistance to help construct two additional softball fields in conjunction with these planned park improvements.

## **Coordination**

Coordination performed for the project includes Pleasant Grove City, the public, and Mountainland Head Start. Various meetings have been held with Pleasant Grove staff, Council, and Mayor to continually update them on project issues and direction.

## **Public Involvement**

Public Involvement has been ongoing since February 2004 and has included mailing fliers, installation of permanent message boards, emails, and meetings. Open House meetings were held on February 24, 2004 and August 5, 2004 to discuss project background, need for the project, environmental factors, preliminary design, and aesthetics. A Public Hearing will be held as a part of this project.

## **Final Section 4(f) Conclusion**

Based upon the above considerations, there is no feasible and prudent alternative to the use of Wills Memorial Park. The proposed project includes all possible planning to minimize harm to the park resulting from such use. The mitigation measures will result in a net benefit to Wills Memorial Park.

**UTAH DIVISION  
FEDERAL HIGHWAY ADMINISTRATION  
PROGRAMMATIC SECTION 4(f) DETERMINATION AND APPROVAL  
UNDER THE NATIONWIDE PROGRAMMATIC 4(f) EVALUATION  
AND APPROVAL FOR FHWA PROJECTS THAT NECESSITATE  
THE USE OF HISTORIC BRIDGES  
(JULY 5, 1983)**

Project # **STP-0089(76)300E State Street (US-89) Railroad Crossing, Pleasant Grove**

**DESCRIPTION/LOCATION OF HISTORIC PROPERTY**

The Railroad Bridge proposed for replacement is located over State Street (US-89) between 200 South and Geneva Road (SR-114) in Pleasant Grove, Utah (see Figure A-1). The existing bridge was built in 1937 by Christensen and Gardner and is a steel plate through girder, skewed bridge. It is a three span structure measuring 61-ft in length. The bridge carries the railroad tracks over State Street in Pleasant Grove. It is in fair condition with the single modification of the removed light poles. The architectural styling includes vertical molded ornamentation, a technique usually identified with the Art Moderne and/or Art Deco designs. Sidewalk tunnels provide pedestrian access beneath the bridge on each side of the road. The original formed concrete handrails along the sidewalk tunnels and all four of the end posts are still in place.

Consult the Nationwide Section 4(f) Evaluation as it relates to the following items. Complete all items. Any response in a box ([ ]) requires additional information prior to approval. Attach any information. This determination will be attached to the applicable NEPA document.

<b>APPLICABILITY</b>		YES	NO
1.	Will the bridge be replaced and/or rehabilitated with Federal Funds?	<u>  X  </u>	[   ]
2.	Will the project require the "use" a historic bridge which is on or eligible for listing on the National Register of Historic Places?	<u>  X  </u>	[   ]
3.	Will the project impair the historic integrity of the bridge either by demolition or rehabilitation?	<u>  X  </u>	[   ]
4.	Has the bridge been determined to be a National Historic Landmark?	[   ]	<u>  X  </u>

**ALTERNATIVES CONSIDERED**

Consult the Nationwide Programmatic Section 4(f) Evaluation for the generic reasons that might be addressed. The evaluation of alternatives for the subject project, however, must quantify those reasons as applicable and be supported by circumstances of the project. **All of the following alternatives must be evaluated.**

	YES	NO
1. The "Do Nothing" alternative has been studied and it has been determined for reasons of maintenance and safety not to be feasible and prudent.	<u>  X  </u>	[   ]

- |    |   |          |     |
|----|---|----------|-----|
| 2. | The build on a "New Location" without using the old bridge alternative has been studied and it has been determined for reasons of terrain, and/or adverse social, economic or environmental effects, and/or engineering and economy, and/or preservation of the old bridge, not to be feasible and prudent. | <u>X</u> | [ ] |
|    |   |          |     |
| 3. | Rehabilitation of the existing bridge without affecting the historic integrity of the bridge has been studied and it has been determined for reasons of structural deficiency and/or geometrics that rehabilitation is not feasible and prudent.  | <u>X</u> | [ ] |

## MEASURES TO MINIMIZE HARM

- | <b>The following must include all possible planning to minimize harm.</b> |  | YES       | NO  |
|---|--|-----------|-----|
| 1.  | For bridges that are to be rehabilitated, the historic integrity of the bridge is preserved to the greatest extent possible, consistent with unavoidable transportation needs, safety and load requirements.*  | <u>NA</u> | [ ] |
|   |  |           |     |
| 2.  | For bridges that are to be rehabilitated to the point that the historic integrity is affected or that are to be moved or demolished, the FHWA has ensured that fully adequate records are made of the bridge in accordance with the Historic American Engineering Record (HAER).** | <u>X</u>  | [ ] |
|   |  |           |     |
| 3.  | For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserves the bridge, and/or, it has been determined that marketing of the bridge is not feasible.***                       | <u>X</u>  | [ ] |
|   |  |           |     |
| 4.  | For bridges that are <b>adversely affected</b> , the FHWA, SHPO, and ACHP have reached agreement through the Section 106 process on the Measures to Minimize Harm and those measures are incorporated into the project.  | <u>X</u>  | [ ] |

### NOTES:

\* This criterion and the provisions of Section 4(f) apply when it has been determined by FHWA in consultation with SHPO and ACHP through the Section 106 process that the rehabilitation work will result in an "adverse effect" on the historic integrity of the structure. When through the above consultation, it is determined the rehabilitation work will result in "no adverse effect" on the historic integrity of the structure, the provisions of Section 4(f) and the above Nationwide Programmatic Section 4(f) Evaluation do not apply.

\*\* Utah State Intensive Level Survey or Intermountain Antiquities Computer System documentation will be completed for the bridge.

\*\*\* This criterion will require the advertisement and marketing of the bridge in accordance with FHWA requirements. Marketing will be addressed in the Programmatic Section 4(f) Evaluation and by appropriate provisions in the Memorandum of Agreement entered into between the State or local agency, FHWA, the SHPO and the ACHP. Refer to Mr. Leather's July 22, 1987 memorandum on the applicable requirements for preservation and marketing. Copies of the advertisement and results of the marketing efforts must be furnished to FHWA prior to replacement of the historic bridge. Marketing is not required when through the Section 106 consultation process between the State or local agency, FHWA, the SHPO and the ACHP, it is determined not a feasible option.

#### **DETERMINATION AND APPROVAL**

Based on the NEPA documentation/Programmatic Section 4(f) Evaluation approved by FHWA on \_\_\_\_\_ the results of the public and agency consultation and coordination as evidenced by the attachments to the Utah Department of Transportation's \_\_\_\_\_ letter attached, the FHWA has determined that:

The project meets the applicability criteria set forth in the Nationwide Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges dated July 5, 1983.

That all of the alternatives set forth in the Findings section of the above Nationwide Section 4(f) Evaluation have been fully evaluated. Based on those Findings, it is determined there is no feasible and prudent alternatives to the use of the historic Pleasant Grove Railroad Bridge.

That the project complies with the Measures to Minimize Harm Section of the above Nationwide Section 4(f) Evaluation and agreement between the FHWA, SHPO and ACHP has been reached.

Accordingly, the FHWA approves the proposed use of the historic Railroad Bridge for the construction of the new Railroad Bridge under the above Nationwide Section 4(f) Evaluation issued on July 5, 1983.

\_\_\_\_\_ Approved \_\_\_\_\_

Date

FHWA Division Administrator

# Programmatic Section 4(f) Evaluation

## STP-0089(76)300E State Street (US-89) Railroad Crossing, Pleasant Grove

This Programmatic Section 4(f) Evaluation is for the Railroad Bridge (structure number OC-149) located over State Street (US-89) between 200 South and Geneva Road (SR-14) in Pleasant Grove, Utah which has been determined eligible for inclusion onto the National Register of Historic Places (NRHP). This evaluation addresses applicability to Section 4(f), project impacts, alternatives considered, minimization of harm, and coordination efforts.



*Historic Railroad Bridge*

### Purpose

The purpose for the project is discussed in Chapter 1 of the Environmental Assessment. The following is a summary of the purpose discussion:

- **Accommodate existing and projected travel demand along State Street.** Providing increased capacity to a notable bottleneck area that is located on an important local and regional arterial facility will allow for better accommodation of existing and projected future travel demands by reducing travel delays and congestion, improving State Street's ability to satisfy both the local and regional needs.
- **Provide a transportation facility consistent with current standards, including those adopted by the Utah Department of Transportation (UDOT) and the American Association of State Highway and Transportation Officials (AASHTO).** Current design standard deficiencies include:
  - Substandard pedestrian facilities
  - Substandard overhead clearance at the Utah Transit Authority (UTA)/Union Pacific Railroad (UPRR) overpass structure.
  - Inadequate storm drain system
- **Provide a transportation facility consistent with state and regional plans.** These plans include:
  - UDOT has identified the need for State Street improvements as part of the state highway system.
  - The Mountainland Association of Governments (MAG), in its Utah Valley 2030 Long Range Transportation Plan (LRTP), has recognized State Street as an important facility to satisfy local and regional travel demands.
- **Enhance opportunities to incorporate intermodal facilities within the corridor.**
  - Provide a roadway section and structure that can better accommodate existing and future rail corridor uses of UTA and UPRR without precluding the possibility of future transit opportunities
  - Provide for future pedestrian and bicycle facilities
- **Improve continuity of State Street (US-89) corridor** by improving the deficient section of State Street with a roadway section that is consistent with the northern and southern segments.

## Need

The need for the project is discussed in Chapter 1 of the Environmental Assessment for this project. The following is a summary of the “need” discussion:

- **Capacity and intersection operations need to be improved.** Drivers on State Street (US-89), from 200 South to Geneva Road are experiencing increasing congestion as traffic volumes have exceeded the capacity of the two-lane segment under the UTA/UPRR Bridge.
- **Roadway and bridge design deficiencies need to be improved.**
  - The existing longitudinal grades of sidewalks along State Street (US-89) exceed the maximum gradients established by the Americans with Disabilities Act (ADA) of 1990.
  - The existing UTA/UPRR bridge does not meet current UDOT design standards for roadway overhead clearances. The minimum overhead clearance established by UDOT is 16'-6"; the existing overhead clearance is 14'-4". In addition to the substandard vertical clearance, the bridge is functionally deficient since its limiting width restricts State Street to two-lanes; a five-lane typical section is needed to accommodate the current and projected Year 2020 traffic volumes.
  - The aging storm drain system, for this portion of State Street, is no longer capable of safely accommodating the current needs. This deficiency results in the accumulation of water within the roadway during typical hydraulic events.
- **System continuity needs to be improved.** The State Street corridor maintains a five to seven lane typical section throughout Utah County, with the exception of the 200 South to Geneva Road segment. This segment narrows to a two-lane typical section as State Street passes under the UTA/UPRR railroad bridge.

## Project Description

The proposed project provides improvements to State Street between 200 South and Geneva Road, including:

- Widening of the corridor to a 127-ft, consistent five-lane typical section (four 12-ft travel lanes with a 14-ft two-way continuous left-turn lane) with 8-ft shoulders, curb and gutter, 11-ft park strips and 6-ft sidewalks between 200 South and Geneva Road.
  - Typical section allows for a future seven-lane typical section to match the back of sidewalk location
- Widening and improving the signalized intersection of State Street and Geneva Road
- Making storm drain improvements along the corridor.
- Making improvements to vertical clearance at the UTA/UPRR crossing – State Street will cross over the railroad tracks.

A Cultural Resources Inventory (*A Cultural Resource Inventory of the Bridge/Underpass Crossing at State Street (US-89) Between 200 South and Main Street in Pleasant Grove, Utah County, Utah*, May 2004) was conducted by EarthTouch which included an evaluation of the project study area to identify historic, prehistoric, and other cultural resources. Historic resources eligible for the NRHP identified in this report include the Pleasant Grove Underpass (Site 42UT1452, Structure #OC-149) and the Union Pacific Railroad and Depot (Site 42UT1029).

The Federal Highway Administration (FHWA), through UDOT, has prepared a Determination of Eligibility and Finding of Effect (DOEFOE) to which the State Historic Preservation Office (SHPO) has concurred (see July 12, 2005 DOEFOE in Appendix D). The proposed project will result in an **Adverse Effect** for the



bridge.

## Applicability

1. The proposed project will remove and replace an existing historic bridge in Pleasant Grove, Utah. The project will use Federal Funds administered through UDOT and FHWA.
2. The proposed project will require the “use” of the historic bridge. The bridge has been determined eligible for inclusion onto the NRHP under Criteria A and C as agreed to by SHPO in the DOEFOE. The proposed project results in an **Adverse Effect** for the bridge. The existing bridge will be demolished.
3. The proposed project will impair the historic integrity of the bridge by demolition. SHPO, UDOT, and FHWA have reached an agreement through the Section 106 process of the National Historic Preservation Act (NHPA) on the measures to minimize harm through the development and execution of a Memorandum of Agreement (MOA) (see Appendix D).
4. The bridge is not considered a National Historic Landmark and is not found on any register.

## Alternatives

The following alternatives avoid any use of the historic property. The impacts resulting from each of these is discussed in the **Findings** section of this evaluation.

1. Do Nothing.
2. Build a new structure at a different location without affecting the historic integrity of the old bridge.
3. Rehabilitate the historic bridge without affecting the historic integrity of the structure.

## Findings

1. **Do Nothing.** The Do Nothing Alternative has been evaluated and is considered not prudent because it would not meet the project purpose and need, as follows:
  - The Do Nothing Alternative would continue the congestion at a notable bottleneck area that is located on an important local and regional arterial facility.
  - The Do Nothing Alternative would not improve the functionality of the State Street (US-89) corridor as an important local and regional, north-south travel corridor consistent with the local and regional planning of MAG, UDOT, and Pleasant Grove.
  - The Do Nothing Alternative would perpetuate the substandard vertical clearance at the UPRR overpass structure.
  - The Do Nothing Alternative would not enhance the opportunities to incorporate inter-modal facilities within the corridor such as UTA rail transit and pedestrian and bicycle facilities.
2. **Build on a New Location Without Using the Old Bridge.** Investigations have been conducted to construct a bridge on a new location or parallel to the old bridge. This alternative is feasible because it is technically possible to design and build but it does not meet the prudent standard. This alternative creates an accumulation of factors that collectively have adverse impacts that present unique problems or reach extraordinary magnitudes. These factors include an unacceptable and

severe adverse social, economic, or other environmental impact; extraordinary community disruption; and additional costs of an extraordinary magnitude.

Unacceptable and severe adverse social, economic, or other environmental impacts:

Building a new bridge away from the present site would result in social, economic, and environmental impacts of extraordinary magnitude. Due to the existing development on all sides of the existing bridge structure, a new bridge to the north or south would require realignment of both rail and roadway transportation elements and would displace a number of residences and businesses and would disrupt established travel patterns.

▪ **North Alignment**

*Historic District:*

Building a new bridge to the north could potentially impact the Pleasant Grove Historic District (listed on the NRHP). The Pleasant Grove Historic District is roughly bounded by 100 North, 500 South, 300 East and 100 West (see Figure A-1).

*Mobile Home Park:*

A mobile home park north of State Street would be directly impacted by building a new bridge to the north and would need to be relocated. The homes located in the mobile home park are fairly old and many are in poor condition and can't be moved. In addition, there are difficulties for mobile home park residents in selling homes in this park and of securing replacement housing at similar expense.



*Mobile Home Park*

Two surveys of residents living in this mobile home park were conducted: the first in March 2004, and the second in March 2005. Results of the 2004 survey suggest that neighborhood social cohesion is not particularly strong among mobile home park residents. Although a majority of the respondents said they would be somewhat sorry or very sorry if they had to move away from the neighborhood, such response may have more to do with a desire to maintain current low-cost housing situations, workplace accessibility, or proximity to friends and relatives living elsewhere in the city than with the strength of social bonds and community cohesion in this small neighborhood.

Data from the 2005 survey are consistent with the 2004 survey results. The two surveys indicate that the mobile home park population is characterized by a high concentration of Hispanic households and a substantial number of households with income levels falling below poverty thresholds. Few mobile home park residents have lived there for longer than five years. The high degree of residential turnover evident in the mobile home park undoubtedly contributes to the fact that social cohesion does not appear to be especially strong in this small, localized neighborhood.

Even though overall social cohesion does not appear to be particularly strong among residents in the corridor-adjacent trailer park, some residents of that neighborhood do report substantial social ties with their neighbors. Most survey respondents indicated that they would be sorry to leave and most were concerned about the potential difficulty of finding another mobile home park within the area that would accept their old mobile homes. Further research indicates that these mobile homes would not be accepted in other mobile home parks due to the age of the trailers being more than ten years old.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by the President on February 11, 1994,

directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent possible and permitted by law. The mobile home park contains several residents who are considered minority or low-income. The north shift would cause disproportionately high and adverse effects on the low-income and minority populations located in the mobile home park. Even though these residents could be relocated to decent, safe, and sanitary housing, in addition to the potential for increased housing costs to these residents, many of these residents would experience adverse effects and adaptive difficulties associated with the disruption and changes to their lives, including the need for adjusting to new neighborhoods, new travel routes, and new shopping areas; changes in proximity to friends and relatives living elsewhere in the city; and potential difficulties associated with workplace accessibility.

*Business Relocations:*

A new bridge to the north would relocate Auto Appearance Plus, Supply Sergeant General Store, Don's Auto, Jefferson Whitney Furniture Co., Allred's Ace Hardware, and Parts Unlimited.

- **South Alignment**

Building a new bridge to the south would relocate several mobile homes in a mobile home park south of State Street that may have similar social and environmental justice issues as the mobile home park located north of State Street (see above discussion). Additionally, the historic property at 100 Adams Street would need to be relocated, and the new alignment would cause substantial impacts to Wills Memorial Park that would impair the function and use of the park.

Extraordinary community disruption:

Building a new bridge to either the south or to the north would cause community disruption in the residential communities in either the mobile home parks to the north or to the south.

Additional construction costs of an extraordinary magnitude:

Building a new bridge away from the present site would result in increased right-of-way, roadway, rail, and structure costs.

An accumulation of factors that collectively, rather than individually, have adverse impacts that present unique problems or reach extraordinary magnitudes:

Collectively, impacts to the mobile home park residents, impacts to historic properties and Wills Memorial Park, and increased costs associated with building a new bridge away from the present site present unique problems and reach extraordinary magnitudes.

No responsible party to maintain bridge

It is not feasible and prudent to preserve the existing bridge since no responsible party can be found that would maintain the bridge in its current location if it were left in place.

3. **Rehabilitation Without Affecting the Historic Integrity of the Bridge.** An alternative to rehabilitate the historic bridge without affecting the historic integrity of the structure was evaluated and determined not prudent since measures to provide adequate width to accommodate increased right-of-way would affect the historic qualities that make the bridge eligible for the NRHP, such as the vertical molded ornamentation, the original formed concrete handrails along the sidewalk tunnels, and the end posts.

## Measures to Minimize Harm

The proposed action replaces the existing bridge with a new structure, requiring demolition of the existing historic bridge. The Proposed Action includes all possible planning to minimize harm, including the following:

- UDOT has determined that this bridge cannot be relocated for an alternative use (see December 20, 2005 letter in Appendix D), and it will be demolished to allow for construction of the overpass. The construction materials used, and their size, location, and deteriorated conditions, would not allow this bridge to be relocated.
- SHPO, UDOT, and FHWA will reach an agreement through the Section 106 process of the NHPA on the measures to minimize harm through the development and execution of a Memorandum of Agreement (MOA). See MOA in Appendix D.

## Coordination

SHPO has concurred with UDOT's DOEFOE. A copy of the SHPO's concurrence of the DOEFOE is attached in Appendix D. As agreed to in the DOEFOE the proposed project will have an **Adverse Effect** on the historic bridge. To mitigate for the **Adverse Effect**, an agreement between the SHPO, UDOT, and FHWA will be executed in a MOA prior to the demolition of the historic bridge. The MOA will stipulate specific measures to take into account for the adverse effects on the historic bridge. These measures will be incorporated into the final project.

Additional coordination performed for the project includes Pleasant Grove City, the public, historic organizations, and Native American Tribes.

- Various meetings have been held with Pleasant Grove staff, Council, and Mayor to continually update them on project issues and direction.
- Public Involvement has been ongoing since February 2004 and has included mailing fliers, installation of permanent message boards, emails, and meetings. Open House meetings were held on February 24, 2004 and August 5, 2004 to discuss project background, need for the project, environmental factors, preliminary design, and aesthetics. A Public Hearing will be held as a part of this project.
- Native American consultation was initiated by letters sent from FHWA requesting information on any historic properties of traditional religious and/or cultural importance and notification of interest in being a consulting party on the project. Letters were sent to the Skull Valley Band of Goshute Indians, Goshute Tribal Council, Northwestern Band of Shoshone Nation, and the Ute Indian Tribe.
- A notice of Adverse Effect for the UPRR Railroad Bridge (Site 42UT1452) was placed in the Salt Lake Tribune, the Deseret Morning News, and the Daily Herald (see proof of publication and written comments in Appendix D).
- Certified Local Government (CLG) coordination was initiated with a phone conversation to Mildred B. Sutch, Chairperson, of the Pleasant Grove Historic Preservation Commission. Mildred Sutch does not have any concerns about removing the bridge. She understands that traffic issues necessitate the removal of the bridge.

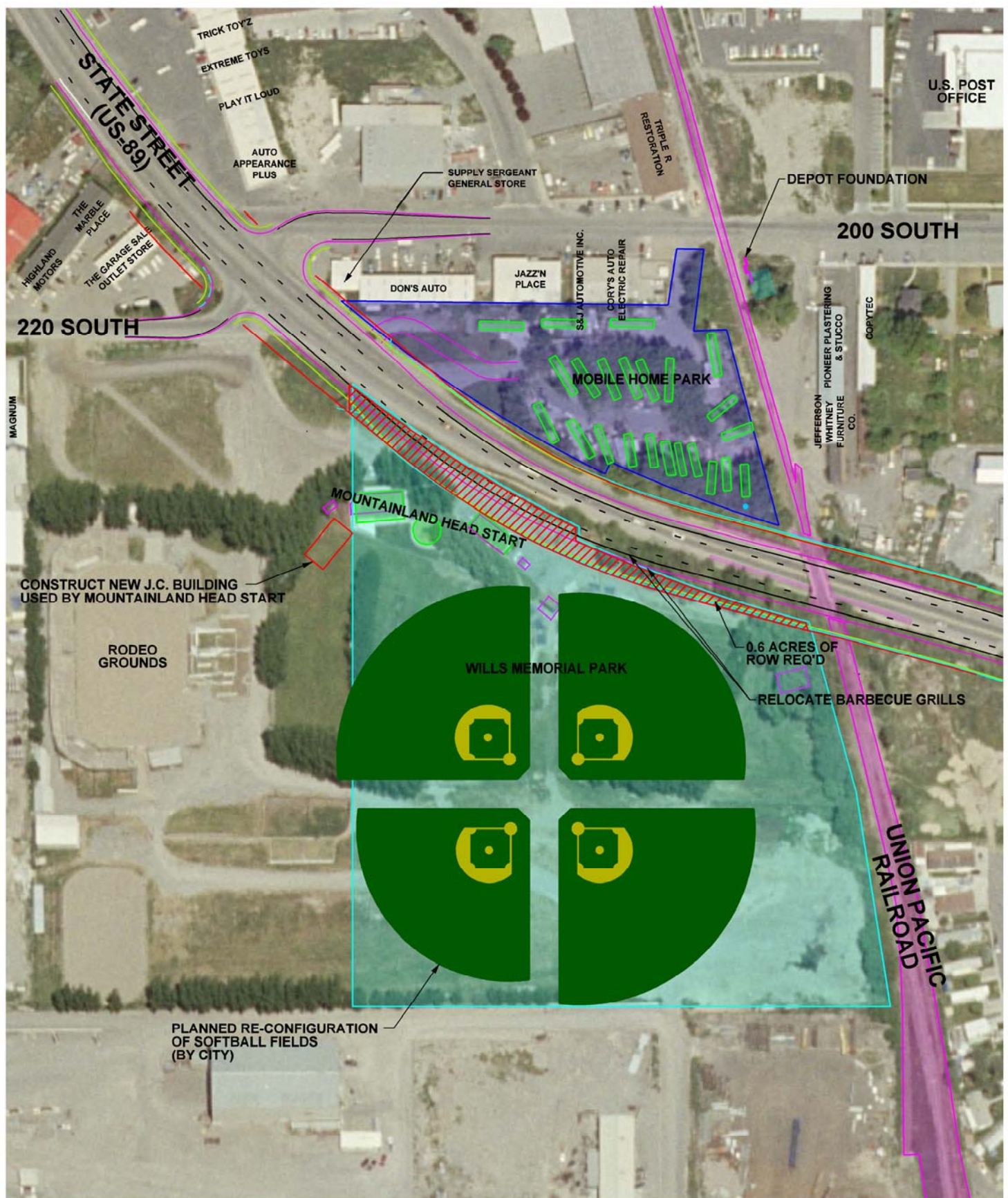
## Final Section 4(f) Evaluation

Based upon the above considerations, there is no feasible and prudent alternative to the use of the historic bridge. The proposed action includes all possible planning to minimize harm to the bridge resulting from such use.



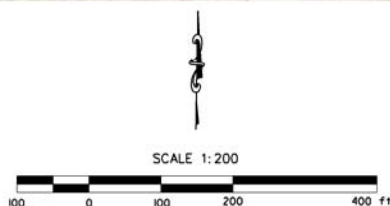






## LEGEND:

- PROPOSED RIGHT-OF-WAY
- ▨ RIGHT-OF-WAY REQUIRED
- SECTION 4(f) PROPERTIES
- SECTION 4(f) STRUCTURES
- ENVIRONMENTAL JUSTICE PROPERTIES
- ENVIRONMENTAL JUSTICE STRUCTURES



PROPOSED ACTION  
IMPACTS TO WILLS MEMORIAL PARK  
FIGURE A-2



